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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/596,389 | 02/05/2007 | David M. Hampson | 82047001/P3138-US | 5991 |

25005 7590 08/24/2009

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| EXAMINER |
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YOUNG, RACHEL T

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| ART UNIT | PAPER NUMBER |
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3771

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| NOTIFICATION DATE | DELIVERY MODE |
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08/24/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket-ip@dewittross.com

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/596,389 | Applicant(s) HAMPSON ET AL. | |
| | Examiner RACHEL T. YOUNG | Art Unit 3771 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/12/06, 9/14/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Preliminary Amendment

1. This office action is responsive to the preliminary amendment filed on 8/12/06. As directed by the amendment: claims 4 and 6 have been amended and claims 7-18 have been newly added. Thus, claims 1-18 are presently pending in the application.

Foreign Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “noninflatable portion” in line 2 of claim 10, and the “heating elements on or within the inner sheet” of claim 14 must be shown or the feature(s) canceled from the claim(s). Also, the drawings should show how the entirety of the inner sheet is heated from claim 15. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

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number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 10 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention without undue experimentation. Claim 10, lines 1-2 recites “both the inflatable bladder and noninflatable portion are defined between inner and outer layers

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of material"". It is unclear how the noninflatable portion is defined between inner and outer layers of the material.

6. Regarding claim 15, Claim 15 recites ""the entirety of the inner sheet is heated"". It is unclear how this is occurring from the drawings and specification.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the 4th line of claim 1, it is unclear what is meant by ""the whole of the limb covered by the garment"". Examiner suggests --the part of the limb covered by garment-- to avoid confusion that the entire limb is covered by the garment.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 3-4, and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin (U.S. Patent Pub. 2002/006886 A1).

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As to claim 1, Lin teaches an inflatable compression device (Fig. 2) comprising a garment to encircle a limb (Fig. 11), the garment having at least one bladder ("air sac" 23) (Fig. 2) inflatable by a pump (112) (Fig. 3) to apply pressure (Page 2, ¶ 19, ll. 7-9) to a specific area of the limb covered by the garment (Fig. 11), the garment further having means to warm (Page 2, ¶ 17, ll. 18-19) substantially the whole of the limb covered by the garment (Page 2, ¶ 17, ll. 18-19).

As to claims 3-4, Lin teaches that the warming means comprises heating elements (24) (Fig. 2) and that the garment comprises an inner layer (22) (Fig. 2) of material having the warming means, the inner layer joined together with an outer layer (middle number 11 of Fig. 2) of the garment at their peripheries (Fig. 2-3) enclosing the bladder in between the layers (Fig. 2-3).

As to claim 8, Lin teaches that the garment includes fasteners (14) (Fig. 2) at opposing portions of the joined peripheries of the inner and outer layers (Fig. 2), whereby the garment may be wrapped about a limb (Fig. 11) and fastened at the fasteners to maintain the garment on the limb (Fig. 11) (Page 1, ¶ 16, ll. 11-15).

As to claims 9-10, Lin teaches that the inflatable bladder is defined over only a portion of the garment (Fig. 2), that the garment includes at least one noninflatable portion (26) (Fig. 2) extending from the bladder (Fig. 2), that the noninflatable portion defining a flap (Fig. 2) which is wrappable about at least a portion of a limb (Fig. 11), and wherein both the inflatable bladder and noninflatable portion are defined between inner and outer layers of material (Fig. 2).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent Pub. 2002/006886 A1).

As to claim 2, Lin teaches that the warming means comprises an electrically heated material (24) (Fig. 2) (Page 2, ¶ 19, ll. 7-10). Lin is silent regarding that material being flexible. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lin's massaging strap such that the electrically heated material was flexible for the purpose of providing comfort to the user and conforming better to the limb.

As to claim 6, Lin discloses the claimed invention, but is silent regarding the pressure applied to the limb is 60 mmHg over 10-12 seconds. However, Lin teaches that the air sac can produce intermittent expansion (Page 2, ¶ 19, ll. 15-16). The feature of choosing a particular pressure, i.e., 60 mm Hg over 10-12 seconds is considered as an obvious design choice since Lin's massaging strap has the same structure as claimed and it appears that Lin's massaging strap would be able to support such particular pressure.

13. Claims 5, 7 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Kuiper et al. (U.S. Patent Pub. 2003/0191420 A1).

As to claim 5, Lin discloses the claimed invention, but is silent regarding that both the inner and outer layers of the garment are vapour permeable, and that the outer layer is formed of inextensible material. However, Kuiper teaches a therapeutic limb covering with both the inner (“outside surface of inner layer liner” 44) (Fig. 5A) and outer layers (“outer shell” 32) (Fig. 5A) of the garment vapour permeable (“polyester” Page 4, ¶ 62, ll. 5-11) (“denim” Page 4, ¶ 60, ll. 7-11), and that the outer layer is formed of inextensible material (“provide inelasticity” Page 4, ¶ 60, ll. 7-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lin's massaging strap such that both the inner and outer layers of the garment are vapour permeable and the outer layer is inextensible, as taught by Kuiper, for the purpose of providing comfort to the user and structural support to the limb.

As to claim 11, Lin teaches an inner sheet (22) (Fig. 2) extending at least substantially parallel (Fig. 2) to the outer sheet (middle number 11 of Fig. 2), and an inflatable bladder (“air sac” 23) (Fig. 2) situated between the inner and outer sheets (Fig. 2-3). Lin is silent regarding an inextensible outer sheet. However, Kuiper teaches an inextensible outer sheet (“provide inelasticity” Page 4, ¶ 60, ll. 7-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lin's massaging strap, such that the outer sheet was of an inextensible material, as taught by Kuiper, for the purpose of providing structural support to the limb.

As to claims 12-13, Lin teaches that the outer sheet and inner sheet are joined along their peripheries (Fig. 2-3), and that the bladder is spaced from at least a portion

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of the joined peripheries (Fig. 2-3), and that the bladder is affixed to the outer layer of the device (Fig. 2-3).

As to claims 14-16 Lin teaches heating elements (24) (Fig. 2) on the inner sheet (Fig. 2), and that the entirety of the inner sheet is heated (Fig. 2-3). The heating elements are directly on the inner sheet so the entirety of the inner sheet would therefore be heated. Lin also teaches that the bladder is affixed to the outer layer of the device (Fig. 2-3).

As to claim 18, Lin teaches that the pump ("air-filling pump" 112 not shown) provides gas to the bladder (Page 2, ¶ 17, ll. 20-23) ("intermittent expansion" Page 2, ¶ 19, ll. 15-16) at a pressure of no greater than approximately 60 mmHg. Although Lin does not expressly disclose a pressure of no greater than approximately 60 mmHg, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lin's massaging strap such that the pump provides a pressure of no greater than approximately 60 mmHg for the purpose of providing sufficient massage therapy to a limb, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

14. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin/Kuiper in view of Arkans (U.S. Patent No. 6007559).

As to claim 17, Lin teaches a pump ("air-filling pump" 112 not shown) in communication with a bladder (Page 2, ¶ 17, ll. 20-23), the pump cyclically providing gas ("intermittent expansion" Page 2, ¶ 19, ll. 15-16) to the bladder and wherein the

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pump repeatedly provides gas to the bladder for up to 2/10 of a minute. Although Lin does not expressly disclose that the pump repeatedly provides gas to the bladder for up to 2/10 of a minute, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lin's device such that the pump repeatedly provides gas to the bladder for up to 2/10 of a minute, for the purpose of providing sufficient massage therapy to a limb, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Lin is also silent regarding removing gas from the bladder and removing at least some of the gas from the bladder for the remainder of the minute. However, Arkan's teaches removing gas from the bladder (Col. 11, ll. 25-28) and removing at least some of the gas from the bladder for the remainder of the minute (Col. 11, ll. 25-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lin's massaging strap to include removing gas from the bladder the remainder of the minute, as taught by Arkans, for the purpose of providing a sufficient treatment regime for a patient (Col. 11, ll. 18).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Grosso (U.S. Patent Pub. 2003/0125650 A1) and Kelly et al. (U.S. Patent No. 5383919) to thermal heat and compressive limb therapy. Any inquiry concerning this communication or earlier communications from the examiner should be

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directed to RACHEL T. YOUNG whose telephone number is (571) 270-1481. The examiner can normally be reached on Monday through Thursday, 7 AM-5:30PM, Est..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. T. Y./
Examiner, Art Unit 3771

/Justine R Yu/
Supervisory Patent Examiner, Art Unit 3771